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ABSTRACT

A study examined whether point of entry into the work force affects earnings growth and employment stability. The Pennsylvania Regional Economic and Social Information data set (a 5% sample of workers whose wages were reported to the state's unemployment insurance program in 1969-1991) served as the study population. Analyses of the earnings growth experienced by workers who began working in the service, retail trade, and food service sectors before 1984 demonstrated real earnings increases by 1991 of up to 169%, 185%, and 470%, respectively. Workers who began working in 1984-1987 showed roughly two-thirds as much earnings growth as prior groups of work force entrants. Further analysis established that even when the relatively low entry-level wages of service industry workers compared to the entry wages of workers in manufacturing/heavy industry are taken into account, entry-level service and retail trade workers improve their economic status in absolute and relative senses. It was concluded that welfare reform should not be predicated on the notion that the entry-level wages offered in the industries where those leaving welfare can find employment are the only wages those workers can ever expect. (Eleven tables/figures are included. Appended are data about private sector entrants in 1975-1991.) (MN)

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EARNINGS GROWTH AND EMPLOYMENT STABILITY OF WORKFORCE ENTRANTS

DOES THE POINT OF ENTRY MATTER?

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The Employment Policies Institute Foundation is a non-profit research organization dedicated to expanding employment opportunities at all levels in America's economy. In particular, EPIF believes that entry-level positions often provide the best job-training and education programs that many Americans, especially young Americans and those seeking to move from welfare to work, can have. By ensuring that these entry-level opportunities are preserved for those seeking a port of entry into the workforce, America can make substantial improvements in both unemployment and long-term productivity.

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EARNINGS GROWTH AND EMPLOYMENT STABILITY OF WORKFORCE ENTRANTS

DOES THE POINT OF ENTRY MATTER?

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A major thrust of "welfare reform" has been the need to move welfare recipients into work. At the same time, concern has been voiced that the long absences from the workforce associated with welfare receipt, combined with the relatively low skills of this population, will inevitably steer many of them to entry-level work at entry-level wages. The desire to enforce work requirements is then tempered by concern over long-term earnings viability—will entry-level employment lead to long-term earnings growth or to income stagnation? In short, will work prove more rewarding than welfare in the long run?

In this report Dr. Frederick Tannery proves that fears of stagnation at the entry-level wage are unfounded. Low initial earnings do not lead to a lifetime of low-wages. No matter the industry in which people gain an entry point into the workforce, they nearly always change jobs and industries, trading up on their experience and acquired skills to obtain higher-paying employment. After just a few years, workers who began by working in historically low-paying sectors like retail trade and services, in relatively unskilled occupations (cashiers and sales help, for example), are virtually indistinguishable on the basis of their earnings from workers who began their employment in proverbial "good" jobs like manufacturing.

Earnings Growth from the Entry-Level

Earnings growth is a function of continued presence in the workforce. Dr. Tannery's finding show that individuals who began working in the service sector prior to 1984 showed real earnings growth of up to 169 percent by 1991. Those who began working in the trade sector (primarily retail trade) showed growth of up to 185 percent over this same period. And, those who began their work lives in food service employment (a sub-sector of the trade industry frequently criticized for its low initial wages), showed earnings growth of almost 470 percent—**a five-fold increase** in their real, inflation-adjusted earnings. This increase in earnings is particularly striking given that fully 22 percent of the job entrants in this study started their work histories in the food service industry.

Even those workers who do not change industries continue to show earnings increases—they still manage to more than double their earnings.

Those who began work in later years showed commensurately lower earnings growth, reflecting their shorter workforce tenure. The group of workers who started work in 1984-1987, for example, showed roughly two-thirds as much earnings growth as prior groups of workforce entrants. Nevertheless, they still achieved major improvements in their wages. Service workers showed an increase of almost 110 percent in their earnings by 1991, trade workers experienced real earnings gains of close to 140 percent, and the food service workers showed a 285 percent increase in wages. By 1991 all of these groups had more than doubled their real earnings.

This substantial earnings growth reflects the massive number of job changes that take place among recent entrants to the workforce. Within five years only about 10 percent of workers, regardless of whether they began by working in manufacturing or services, are still employed in the same industry where they took their first job. These job changes lead to dramatically enhanced earnings. Yet even

those workers who do not change industries continue to show earnings increases—they still manage to more than double their earnings.

Earnings Growth Relative to Other Workers

One of the reasons that workers in food service and other trades show such robust earnings growth is that their wages were relatively low to begin with. Yet comparing earnings of these individuals to those of workers who entered the workforce through manufacturing and heavy industries shows that low-wage, entry-level workers improve their economic status in both an absolute and relative sense. For example, the group that began work in services prior to 1984 had starting wages only 58 to 67 percent as high as those of manufacturing workers. **Yet by 1991, these service workers had earnings *greater* than workers who began in manufacturing. Not only had they closed the gap, they had reversed it**. Food service entrants, who began their work histories earning only 24 percent as much as manufacturing workers, had by 1991 narrowed this gap to between 89 and 92 percent, a relatively small difference of about $2,000 dollars a year.

After just a few years, workers who began by working in historically low-paying sectors like retail trade and services ... are virtually indistinguishable on the basis of their earnings from workers who began their employment in proverbial "good" jobs like manufacturing.

Again, commensurately smaller relative earnings changes took place among later workforce entrants, reflecting their shorter time in the work place. Even so, significant changes took place in relative earnings: entrants in services between 1984 and 1987 began by earning only 27 percent as much as manufacturing entrants. By 1991, this gap had narrowed so that they earned 71 percent as much as workers who began in heavy industry.

The message for welfare reform is clear: focusing on initial rather than long-term earnings fails to capture the crucial benefits that accrue from a continued presence in the workforce. Welfare reform should not be predicated on the notion that the entry-level wages offered in the industries where those leaving welfare can find employment are the only wages these workers can ever expect. The role of work in securing higher earnings is fundamental. And, as this study shows, the evidence of earnings growth is overwhelming.

About the Data

This report was based on the Pennsylvania Regional Economic and Social Information (PRESI) data set. This is a 5 percent sample of all workers whose wages were reported to the state's unemployment insurance program at any time between 1969 and 1991. (Wage reporting to the unemployment insurance program establishes eligibility for benefits under the program but is not synonymous with a spell of unemployment.) The PRESI dataset contains observations on over 700,000 workers.

Carlos Bonilla
Employment Policies Institute Foundation

Employment gains during the 1980s were not evenly distributed over industrial sectors. Of the 17 million newly created jobs, 15 million were in the trade and service sectors. Overall manufacturing employment, on the other hand, was stagnant while the well-paying durable manufacturing sector reported losses of 453,000 jobs. Critics of the economy's performance contend that the economy offered fewer "good" jobs in 1990 than it did in 1980 and that the fast-growing trade and service sectors provide only low-wage, part-time jobs with little opportunity for advancement, no fringe benefits, and no economic security.

The trade and service industries are important ports of entry into the labor market where inexperienced workers acquire skills and discipline that qualify them for better-paying positions in these industries and elsewhere.

These critics fail to recognize important labor market dynamics. The trade and service industries are important ports of entry into the labor market where inexperienced workers acquire skills and discipline that qualify them for better-paying positions in these industries and elsewhere. Furthermore, the trade and service industries offer more first jobs to many people who would most likely be unemployed without them.

Most importantly, the renewed interest in reforming the welfare system to include a strong work component forces us to assess how much earnings mobility takes place at the entry level. The long-run success of welfare reform relies on the ability of individuals making welfare-to-work transitions to not only secure employment in the short-term, but also realize increases in earnings beyond the entry-level wage.

The strong earnings gains found among new entrants into the workforce, especially among those who began their work histories in low-wage sectors such as food service, demonstrates that it is quite feasible to expect significant improvements in the earnings of low wage workers.

The long-run success of welfare reform relies on the ability of individuals making welfare-to-work transitions to not only secure employment in the short-term, but also realize increases in earnings beyond the entry-level wage.

This report examines the employment and earnings history of new entrants into the workforce in Pennsylvania between 1975 and 1991. I then compare findings for the state with those for the nation. In particular, I focus on workforce entrants into the fastest-growing and lowest-paying two-digit Standard Industrial Classification (SIC) industry, Eating and Drinking Places (SIC 58), hereafter food service. During the 1980s, food service grew by a robust 32.3 percent; by 1990, the industry provided jobs for 5.66 million U.S. workers.

I use a new data set that contains longitudinal wage histories of a 5-percent sample of workers covered by the Pennsylvania Unemployment Insurance (UI) program. This report highlights the employment and earnings one, three, and five years following entry.

The most notable findings of this report are:

- Eating and Drinking Places offered initial employment to 19.4 percent of Pennsylvania workers despite having only a 4.5 percent share of the state's employment.

- While the number of labor force entrants fell as Pennsylvania's economy deteriorated during the early 1980s, the percentage of entrants in the food-service sector increased from 15 percent in 1975 to 23 percent in 1987 before falling to 21 percent in 1991.
- Most food-sector entrants work part-time at or near the minimum wage. Most entrants are high school age, and a small majority are women.
- First jobs typically last for a short period. Most entrants into all industrial sectors change industries within a year. Fewer than 20 percent of entrants are in the same industry three years after entry and only 11 percent of entrants outside the service sector are in the same sector after five years.
- Food-service entrants report lower earnings than other entrants and those who stay in the sector have lower earnings growth than do industry changers. For the large majority of all entrants who change industries, earnings five years after entry are largely unaffected by the industry of initial employment.
- Food-service entrants enjoy the largest earnings gains as they move from part-time to full-time jobs, and from low-wage to higher-wage industries. Earnings differences at the end of our study period for those who found jobs prior to 1984 are small.
- The trend in food-service employment in Pennsylvania during the study period is remarkably similar to the national trend, although a smaller proportion work in the sector in the state.
- Entry into food service shows sharp seasonal swings and varies directly with total food-service employment and the population of potential entrants. Higher unemployment rates and increases in the minimum wage reduce the number of openings for inexperienced workers.

Data

The Pennsylvania Regional Economic and Social Information (PRESI) data set is a 5-percent sample of workers covered by the state's Unemployment Insurance (UI) program at any time between 1969 and 1991. (Coverage under the UI program is not synonymous with a spell of unemployment. It merely identifies an individual as eligible for benefits). It was assembled from administrative records of the Pennsylvania Department of Labor and Industry and hence avoids the reporting errors that plague other longitudinal surveys of workers when information is obtained retrospectively. The data include detailed information about a worker's principal employer in each year, including firm size, principal industry, and county of operation.[1] The data set also reports business reorganizations such as mergers and acquisitions. Reporting of quarterly earnings allows for precise measurement of earnings and earnings growth. Administrative data from 1979 also provide information on claims for unemployment insurance.

The size and timeliness of the data are among its most important assets. PRESI contains over 700,000 workers, which permits the narrow focus of this study—a single two-digit SIC industry. Since the data set is restricted to workers covered by the Pennsylvania UI program, workers enter the data base when they start a job or move into Pennsylvania from another state. In order to minimize the number of interstate migrants, I restricted the sample to those whose Social Security Identification Numbers were issued in the state of Pennsylvania.[2] Over 240,000 workers met this criteria, which is more than enough

1 For workers with multiple employers during the year, the principal employer is determined as the one for which the worker reported the highest earnings. This may underreport the number of people working in the relatively low-wage food-service sector. For firms with operations in more than one county, the primary county is the one with the most employment.

observations to allow for stratifications comparing entrants over time, between industries, and extent of initial employment. I also omitted workers with earnings prior to 1975, which sharply reduced the number of reentrants in the sample.

Unfortunately, only about 20 percent of the sample contains demographic data. Age and sex are only present for those in the sample in 1976 when the Social Security Administration (SSA) provided this information, or for people who claimed unemployment benefits. We also know where people worked, but not necessarily where they lived. Race, education, and marital status are not available.[3]

RESULTS:

Employment

The number of people who entered the labor force during the 17-year study period is very sensitive to cyclical swings in the economy. Figure 1 reports a sharp drop in the number of entrants in the early 1980s and a more moderate reduction in 1990-1991. The initial drop coincided with the particularly deep recession in 1981-1982, which reduced the incidence of entry in 1982 to less than half the level in 1978, the peak year. The number of entrants fell by over 30 percent in the last two years of our study period as the recession of 1990 and subsequent low job growth reduced opportunities for inexperienced workers. Furthermore, there was an unfortunate timing in increases in minimum wages on the heels of the recessions in both periods, which further reduced job prospects of potential entrants into the labor market. The peak in 1978 occurred during a strong business expansion. Part of the spike in 1984 can be attributed to a change in UI coverage that led many experienced workers to first report their earnings to the State Employment Service.[4]

Figure 1

Entrants by Year, 1975-1991

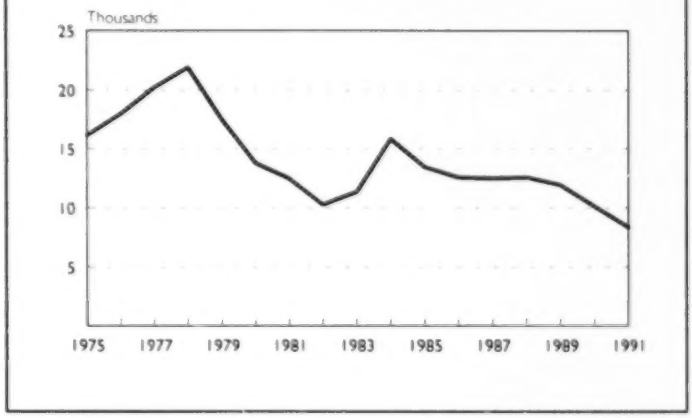

Figure 1 shows a clear downward trend; the number of entrants in the last half of the study period is well below the number of entrants in the first half. This general decline reflects a reduction in the pro-

2 Since this paper relies on a worker's first appearance in the administrative data to identify that worker as a new entrant into the workforce, it was necessary to exclude migrants who may have entered the state with long work histories and higher salaries.

3 It is possible, albeit expensive, to determine age, sex, and race through a match by the Social Security Administration (SSA). Disclosure rules prohibit release of the data, so analysis must be done under SSA supervision.

4 In 1984, Pennsylvania levied a payroll tax on earned income to satisfy the state's UI deficit to the federal government. The earnings of employees in organizations in which wages are requested to determine eligibility for UI benefits, such as the state and local government, were reported in 1984 to ensure compliance with the new law. Previously, wages were only reported for the group who claimed UI benefits.

portion of Pennsylvania's population reaching working age. Between the census years 1980 and 1990 the proportion of 15-to-19-year-olds in the general population fell from 9.1 percent to 6.9 percent; school enrollment in the 11th and 12th grades fell by 36.6 percent between the 1974-75 and 1991-92 school years. While this was part of a national trend as the Baby Boom of the postwar years gave way to the Baby Bust following 1964, the relative drop in the number reaching working age was greater in Pennsylvania.

Structural changes in the state's economy dramatically affected the opportunities available to inexperienced workers as well as those already employed. Figure 2 reports the industrial distribution of entrants over the study period. The proportion finding jobs in food service grew from 15 percent in 1975, to 23 percent in 1987, falling to 21 percent in 1991. The manufacturing-dominated Mining/Manufacturing/Construction/Transportation (MMCT) industries, which provided roughly one-third of the state's employment, offered fewer jobs to entrants than did the food-service industry.

Figure 2

Entrants by Industry, 1975-1991

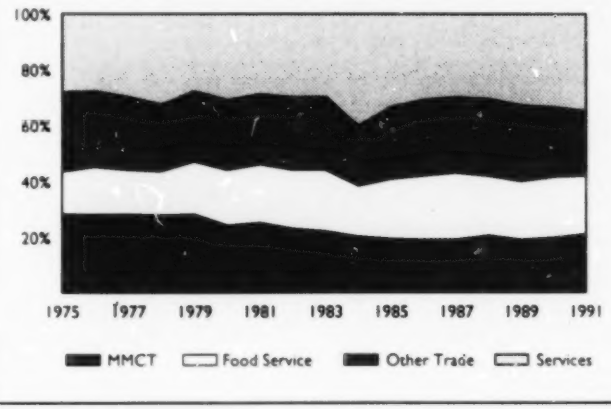

Figure 2 also indicates that the sharp increase in entrants in 1984 noted in Figure 1 were largely employed in the service sector. Nearly all increases were in the public sector—schools, hospitals, and public administration. Furthermore, the average earnings of entrants in 1984 were over twice as high as the initial earnings of entrants into the same industries in either 1983 or 1985. These findings clearly indicate that most of the entrants reported in 1984 were not new to the labor force, but were experienced workers whose earnings were first reported to the state. Figure A1 in the appendix reports the industrial distribution of entrants into the private sector. This figure is very similar to the industrial distribution of all entrants, except in 1984.[5]

Characteristics of Entrants into the Workforce

Table 1 presents demographic characteristics for whom the information is available as well as job characteristics for the full sample. Food-service entrants are nearly evenly divided between male and female and usually work part-time. While the data do not report hours worked directly, dividing earnings in *either* of the first two calendar quarters of work by the prevailing minimum wage provides an upper bound estimate of the number of hours worked, assuming compliance with minimum wage laws. This calculation indicates that over two-thirds of entrants worked fewer than 18 hours per week, and nearly one-fifth worked between 18 and 24 hours per week in either quarter. Nearly two-thirds of food-service entrants were high school age. This suggests that low earnings simply reflect a high proportion of part-time work typical of high school students.[6]

5 I also generated Tables 1 through 4 for only the private-sector entrants. Only those in services were materially affected. The public-sector entrants in 1984 made few job moves compared to other entrants.

6 Low earnings could also be due to a separate spell of work surrounding a period of joblessness rather than very short work weeks.

Food service also provided more initial employment opportunities outside major metropolitan areas than did the service sector or other trade industries, but fewer than MMCT industries, which include more resource-based industries such as mining, lumber, and some manufacturing activities. Given the general drop in the MMCT sector in the last half of the study period, food-service employment is an important source of jobs in relatively depressed areas.

Table 1 also reports entrants as permanent or temporary. (Permanent workers were defined as workers having earnings in at least three consecutive quarters after entry. This eliminates purely temporary jobs during the summer months.) A higher proportion of entrants into food service and other trade sectors were permanent workers. Although entrants in the MMCT sector had higher earnings, their jobs were often less secure due to greater sensitivity to the business cycle, or were more likely to be short-term jobs such as summer replacements for vacationing workers.

Table 1

Characteristics of Entrants By Industry of First Job

(Percent Distribution)

	Industry			
Characteristic	**MMCT**	**Food Service**	**Other Trade**	**Services**
Sex:				
Male	10.8	5.1	7.3	4.6
Female	6.7	5.3	5.7	6
Unknown	82.5	89.5	86.9	89.4
Age:				
Under 18	3.6	5.6	4.9	2.5
18 - 20	5.8	1.9	3.4	2
21+	5.1	1.1	2.4	3.8
Unknown	85.6	91.3	89.3	91.7
Entry Period:				
1975-1979	46.6	33.3	39.7	37.1
1980-1983	19.9	23.3	19.9	19.3
1984-1987	18.4	25.3	22.4	24.7
1988-1991	15.1	20.1	18	18.9
Region:				
Phil&Pgh	22.3	31.4	36.6	36
Other Urban	51	49.1	47.1	46.9
Rural	26.7	19.5	16.3	17.1
Ownership:				
Public	4.3	0.2	0.1	14
Private	95.7	99.8	99.9	86
Employment Status:				
Permanent	37.5	52.2	52	44.2
Temporary	62.5	47.8	48	55.8
Earnings as % of Full Time Minimum Wage Employment				
Under 50%	30.4	67.8	46.8	47.1
50% - 75%	10.7	18.6	20.4	13.7
75% - 100%	8.7	7.3	11.4	8.8
100% - 125%	8.1	3.2	6.4	6.7
125% +	42.1	3.1	15	23.8
Total	**56,869**	**46,277**	**60,893**	**74,395**
(Percent)	23.90%	19.40%	25.50%	31.20%

Notes:
MMCT = Mining, Manufacturing, Construction and Transportation
Other Trade = Wholesale and Retail Trade outside food service
Services = Financial, Services, and Administration
Employment Status: Temporary = less than three quarters with earnings
Earnings % based on full-time, 35 hrs./week at minimum wage

Industry Mobility

Table 2 documents the preponderance of industry mobility and sample attrition among entrants into the workforce. The table reports movement within two-digit and one-digit SIC industries along with employment in new one-digit SIC industries (*New Industry*). A worker who entered the labor force manufacturing *industrial machinery and equipment* (SIC 35) and left that job to manufacture *fabricated metal products* (SIC 34) would have made an employment move within industries measured at the two digit level but stayed within the same industry measured at the one industry level. Fewer than half of the entrants into any sector continued to receive a majority of their earnings in the same industrial sector in the following year. On average, less than 20 percent worked in the same two-digit sector three years after entry, and five years later only 11 percent (outside service industries) had not switched. (Most of the difference between the service sector and other industries is eliminated if the sample is restricted to private-sector workers.) Food-service entrants reported the highest incidence of remaining in the same industry

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Table 2

Mobility Outcomes of Entrants By Years After Entry

(Percent Distribution)

Mobility Outcome	Industry			
	MMCT	Food Service	Other Trade	Services
One Year:				
Same 2-Digit	31.12%	48.51%	45.10%	43.20%
Same 1-Digit	2.22%	10.68%	7.40%	2.30%
New Industry	15.13%	13.39%	16.92%	17.54%
Dropout	51.53%	27.42%	30.59%	36.97%
	100%	100%	100%	100%
Three Years:				
Same 2-Digit	15.67%	18.25%	18.21%	20.81%
Same 1-Digit	3.66%	15.70%	10.95%	3.97%
New Industry	23.86%	29.83%	31.06%	28.94%
Dropout	56.80%	36.22%	39.79%	46.28%
	100%	100%	100%	100%
Five Years:				
Same 2-Digit	11.27%	11.07%	11.29%	15.38%
Same 1-Digit	3.89%	13.41%	10.02%	4.58%
New Industry	26.19%	34.95%	34.21%	30.33%
Dropout	58.65%	40.56%	44.48%	49.71%
	100%	100%	100%	100%

in the year after entry. However, the differences narrowed after three years and were virtually eliminated after five years.

Typically better-paid MMCT workers left the sample at higher rates than other entrants, while lower-wage food-service entrants were the most likely to remain in the sample in the next year (51.5 percent vs. 27.4 percent, respectively). After five years, 58.6 percent of MMCT and 40.6 percent of food-service entrants dropped out of the sample. The high attrition rates of the MMCT workers could be the result of two factors. Many of the largest manufacturing firms have operations in several states, which raises the probability of an interstate transfer. These firms were also the most sensitive to the adverse business climate in the recession. Many factories closed or sharply reduced employment, which created long spells of unemployment and joblessness. Nonetheless, the relatively lower dropout rates among food-service entrants is surprising, given their younger age and the higher migration rates of younger people.[7]

Earnings

Table 3 presents the initial earnings by next year's mobility outcome along with earnings one, three, and five years after entry by mobility outcome. Workers in MMCT industries average over twice the initial earnings reported by entrants in the trade sector and more than four times as much as food-service entrants. Workers who leave the sample in the next year report higher average initial earnings than others, which implies that well-paid workers are the most mobile. Those workers who do remain in the same two-digit industry have higher than average entry earnings than those who change industries.

Workers who *remain* in food service have lower earnings in all subsequent years than industry changers. After five years, workers who remain in food service earn slightly more than half as much as entrants in other trade sectors and about one-third as much as those who stay in the same two-digit SIC outside the trade sector. The low earnings of workers continuing in the food-service industry reflects the general industry earnings relationship as food service provides the lowest hourly wages and shortest work week of any two-digit SIC.[8]

Entrants into other sectors accumulate more valuable experience and their earnings growth is higher if they stay in the same two-digit SIC industry than if they go elsewhere. They also enjoy higher earn-

7 Dropouts do not include workers who cannot be followed beyond the end of the study period.

8 See *Employment and Earnings* for reports of hourly wages and the length of the work week.

ings than entrants into food service regardless of mobility outcome. While entrants outside the food-service industry enjoy higher earnings if they do not change industries, only 11.3 percent of MMCT workers and 15.4 percent of those in services are still in the same industry five years after entry. But the large majority of workforce entrants move to new industries, and their earnings five years after entry have little to do with where they first worked.

These results raise questions about why people remain in food service when movers enjoy real earnings gains. One possibility is that since more entrants into the food-service sector begin in part-time jobs, many continue to work part-time. The average work week in the industry is between 25 and 28 hours, which is categorized as part-time employment. Most people who work part-time do so for reasons other than failure to find a full-time job. They may have family responsibilities, or they may be continuing their education, or have other reasons to work less. Hence, the low earnings of most food-service employees reflect, to some degree, preferences for less than full-time employment. In addition, food-service personnel working as waiters receive tips that are likely to be under-reported; their earnings may be much higher than our data indicate.

Table 3
Real Quarterly Earnings and Earnings Growth By Industry and Mobility Outcome (1991 dollars)

Mobility Outcome	Industry			
	MMCT	**Food Service**	**Other Trade**	**Services**
Initial Quarterly Earnings:				
Same 2-Digit	$2,724	$797	$1,415	$2,209
Same 1-Digit	$2,087	$573	$870	$1,104
New Industry	$1,466	$620	$904	$931
Dropout of Sample In Next Year	$3,829	$745	$2,223	$2,111
Quarterly Earnings After One Year:				
Same 2-Digit	$3,214	$998	$1,722	$2,574
Same 1-Digit	$2,723	$1,005	$1,274	$1,605
New Industry	$1,678	$1,279	$1,444	$1,415
Dropout of Sample In Next Year	$275	$78	$98	$107
Quarterly Earnings after Three Years:				
Same 2-Digit	$4,261	$1,443	$2,611	$3,659
Same 1-Digit	$3,613	$1,637	$2,015	$2,358
New Industry	$2,571	$2,156	$2,367	$2,217
Dropout of Sample In Next Year	$131	$107	$101	$73
Quarterly Earnings after Five Years:				
Same 2-Digit	$4,760	$1,774	$3,306	$4,429
Same 1-Digit	$4,156	$2,262	$2,636	$3,090
New Industry	$3,211	$2,908	$3,069	$2,930
Dropout of Sample In Next Year	$123	$123	$107	$77

While Table 3 reports earnings after entry, it does not directly report earnings change associated with a job change. Table 4 fills in this gap. Table 4 shows the average quarterly earnings and the change in average real quarterly earnings for the first three times a worker moves to a new industry. A move to a new industry can be a move at either the one-digit SIC level or at the two-digit SIC level. Since eating and drinking places are a two digit sub-classification of the broader *other trade* sector there can be, by definition, no industry changes that leave a worker in the same two digit industry. A worker in an eating and drinking establishment that moved to another two-digit trade sector would be making an industry move from *Eating and Drinking* to *Other Trade*. Again, earnings growth mirrors the industry wage profile indicated in Table 3. Workers who leave the food-service industry double their earnings, with the largest gains enjoyed by those moving into the MMCT sector. Those moving into the food-service sector from MMCT industries report substantially lower earnings.

Table 4 also testifies to earnings growth during the study period. The base earnings prior to the second and third move are uniformly increasing, although the incidence of moving into high-wage sectors declines with the number of industry changes reported.

Long-Term Earnings and the Point of Entry into the Labor Market

Table 5 compares the earnings at the end of our study period by the industry and time of entry. Initial earnings differences between industries are sharply reduced by the end of the period for workers who found their first job before 1984. The earnings of entrants in MMCT are lower in 1991 than that of service sector entrants and only 9.2 percent higher than entrants in food service.

Table 4

Quarterly Earnings and Earnings Change By Industry Mobility

Industry of Origin	New Industry			
	MMCT	Food Service	Other Trade	Services
A. FIRST MOVE				
MMCT:				
Base Earnings	$2,129	$1,547	$1,797	$2,165
Change	$796	($594)	($5)	$97
Food Service:				
Base Earnings	$721	n/a	$638	$669
Change	$1,214	n/a	$564	$868
Other Trade:				
Base Earnings	$1,233	$842	$1,064	$1,107
Change	$1,217	$71	$545	$781
Services:				
Base Earnings	$1,307	$876	$1,030	$1,474
Change	$1,086	($1)	$398	$801
B. SECOND MOVE				
MMCT:				
Base Earnings	$2,426	$1,628	$2,134	$2,074
Change	$726	($452)	$174	$259
Food Service:				
Base Earnings	$918	n/a	$854	$886
Change	$1,139	n/a	$563	$853
Other Trade:				
Base Earnings	$1,575	$1,023	$1,379	$1,276
Change	$1,064	$75	$579	$797
Services:				
Base Earnings	$1,720	$1,132	$1,460	$1,799
Change	$1,068	$11	$394	$827
C. THIRD MOVE				
MMCT:				
Base Earnings	$2,840	$1,817	$2,409	•
Change	$576	($481)	$203	•
Food Service:				
Base Earnings	$1,205	n/a	$1,086	•
Change	$1,207	n/a	$782	•
Other Trade:				
Base Earnings	$2,078	$1,325	$1,657	$1,855
Change	$940	($55)	$635	$675
Services:				
Base Earnings	$1,994	$1,307	$1,547	$2,389
Change	$1,055	$0	$684	$575

• Sample size too small to permit accurate estimation.

Workers first employed in food service prior to 1984 enjoyed earnings gains equal to between four and five times their initial earnings, which raised their earnings to levels comparable to other workers. Food-service entrants after 1987 ended the period with sharply lower earnings than workers who were first employed elsewhere. However, their earnings growth averaged 57 percent compared to a modest gain of 6.4 percent among service-sector entrants, and a decrease of 4 percent for those in MMCT.

Pennsylvania vs. the Nation

The PRESI data only contain information on workers covered by the Pennsylvania UI program. Direct inferences about entrants outside the State are valid to the degree that entrants in the state have similar experiences as workers elsewhere. Consequently, this section focuses on the applicability of the Pennsylvania experience to the nation as a whole.

The growth in food-service employment in Pennsylvania is very similar to that of the nation. Figures 3 and 3a show food-service employment at the State and national levels based on monthly data.[9] In both cases there is a positive trend and a strong seasonal component, with robust increases in

9 The Pennsylvania data come from the PA Department of Labor and Industry and the national data is from

the summer months, although the nation's growth exceeds the State's. Consequently, Pennsylvania's share of total food-service employment fell from 4.9 percent to 4.2 percent between 1975 and 1991. Decreases occurred both before and after the economic restructuring during the 1981-1982 recession. In part, the state's relatively smaller food-service sector is due to the relatively smaller employment growth in the state than in the nation. The declining population of young people also reduced the labor pool and the demand for the industry's output, while the sharp recession lowered employment, reduced income, and accelerated out-migration, which added to the downward trend.

Table 5
Real Quarterly Earnings and Earnings Growth By Industry and Entry Period - 1991 Dollars

	Industry			
Entry Period	MMCT	Food Service	Other Trade	Services
1975-1979:				
Initial Earnings	$3,504	$848	$1,841	$2,343
1991 Earnings	$5,266	$4,821	$5,183	$5,567
% Change	50.30%	468.40%	181.40%	137.60%
1980-1983:				
Initial Earnings	$2,960	$724	$1,525	$1,718
1991 Earnings	$4,631	$4,103	$4,346	$4,633
% Change	56.50%	467.40%	185.00%	169.60%
1984-1987:				
Initial Earnings	$2,464	$662	$1,220	$1,562
1991 Earnings	$3,579	$2,555	$2,919	$3,261
% Change	45.30%	285.80%	139.30%	108.80%
1988-1991:				
Initial Earnings	$2,724	$631	$1,200	$1,742
1991 Earnings	$2,614	$992	$1,420	$1,853
% Change	-4.00%	57.20%	18.40%	6.40%

Figure 4 reports the fraction of Pennsylvania and U.S. employment in the food-service industry. There is a positive trend, with seasonal swings. Food service employs a higher percentage of U.S. workers, although the difference narrowed in 1983 and 1984 and then widened until the end of the period. Again, demographic differences between Pennsylvania and the rest of the nation account for the differences.[10]

The ratio of entrants to food-service employees in Pennsylvania is used as a basis for predicting the number of entrants in the nation. Figure A3 in the appendix reports the predicted entrance into food service in the nation by multiplying the ratio of food-service entrants to total food-service employment by employment in the nation. The number of entrants is marked by seasonal swings, but there is no discernable trend. The recession years, 1980-1982, reduced entry sharply during the peak summer quarters.

Differences in economic and demographic characteristics between Pennsylvania and the nation feedback on both the demand for the output of the industry and the available pool of potential entrants. For example, during the study period, national employment grew by 13.9 percent, compared to 9 percent in the state. Between the census years 1980 and 1990, Pennsylvania's population was virtually stagnant (.15 percent increase), compared to an 8.3 percent jump nationally. Furthermore, in 1990, 15.4 percent of Pennsylvania residents were at least 65 years old compared to 12.6 percent of U.S. residents.

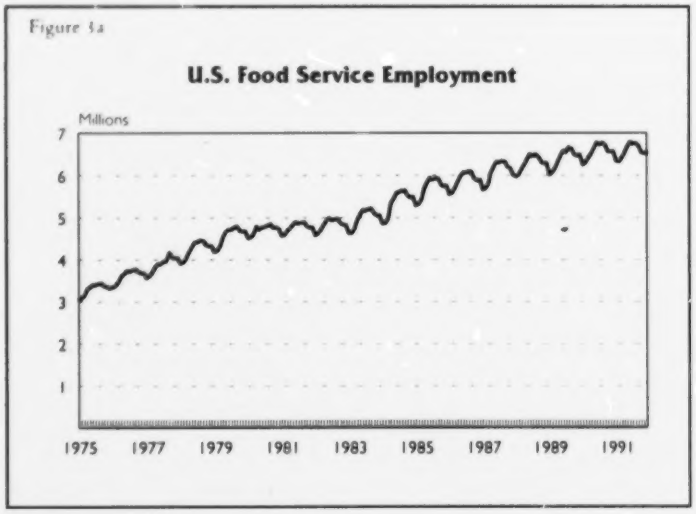
Employment and Earnings. Both are based on ES202 reports.

10 Figure A2 in the appendix shows that the trend in the incidence of entry into food-service firms magnifies the seasonal fluctuations in total employment but with a downward trend. While the number of entrants is falling over time, a growing proportion of new jobs are in food service. For example, food service employed only 4.2 percent of state workers in 1991, yet offered first jobs to 21 percent of Pennsylvanians who began working that year.

Differences in the demographic composition of the state and nation implies that calculation using fixed entrant-to-employment ratios underestimates the number of entrants in the United States, as there are relatively more people who would make themselves available for food-service employment. To overcome these difficulties, I use regression analysis to explain the number of entrants in the Pennsylvania economy in each quarter of the study period.

Figure 4

Figure 4a



The results are in Table 6. The first two columns report regression results using the number of workforce entrants as the dependent variable while the last two columns use the log of workforce entrants as the dependent variable.

All coefficients are statistically significant at the 5-percent level and most at the 1-percent level. As expected, the number of entrants into food service is positively related to both the size of the of the population and the overall size of the industry. The effect of the *Food Service Employment* variable on entrants operates in two ways: job openings available to entrants can occur as firms expand their employment (new hires) or hire one worker to replace another who moves on for various reasons (replacement hires). Replacement hiring increases with the size of the industry and the coefficient on employment in the industry strongly confirms the importance of replacement hiring. The unemployment rate coefficient in column 3 implies that entry rises by almost 4 percent for each 1-percent gain in employment.

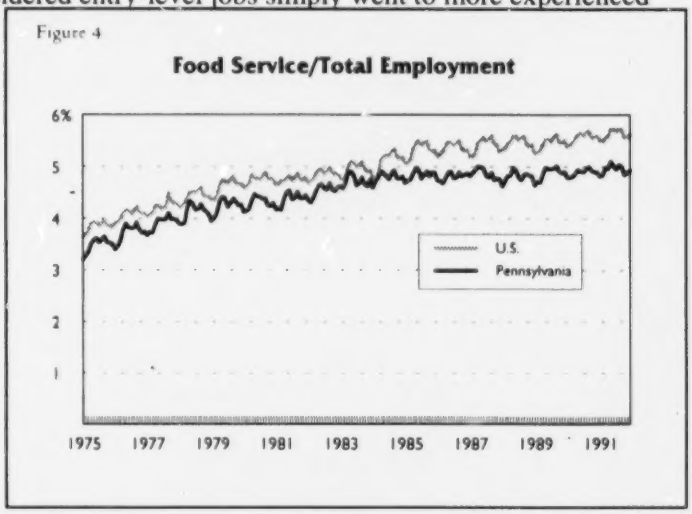
Although the number of new hires in food service depends on the growth of the sector it also exhibits a strong seasonal component, as can be seen in appendix figures A2 and A3. This is estimated in the regression via a dummy variable for *Spring/Summer Quarter* employment. That variable is highly positive.

Pennsylvania's population is counted directly only in census years requiring that it be estimated in the intervening years. The estimation method chosen was to proxy the pool of potential entrants by using enrollment in the 11th and 12th grade since it closely matches the population of potential entrants. Entry increases directly with the size of the population of potential entrants, as shown by the positive coefficient in column 3. That coefficient also indicates that the increase in entrants in food service exceeds the percentage increase in the population of all entrants. This also explains the downward trend in en-

trants observed in the data, since school enrollment dropped by 36.6 percent between the 1974-1975 and 1990-1991 school years. Out-migration further decreased the number of people in the age group most likely to start new jobs.

The minimum wage variable shows that increases in real minimum wage reduced the openings for inexperienced workers. What would be considered entry-level jobs simply went to more experienced workers. This result raises fears that policies that increase labor costs, such as minimum wage increases and mandatory health benefits, reduce the opportunities available to inexperienced workers. While the majority of employed workers will have higher earnings, the costs of these programs fall on those new labor force entrants who fail to find work.

Figure 4



It is tempting to attribute the decline in entrants in association with the higher minimum wage to the fact that the minimum wage increase took place in a time of economic contraction marking the onset of the recession. Note, however, that the regression results show cyclical sensitivity of entry into food service as fewer people move into jobs at times of high unemployment. The trend in food-service employment, however, did not change during recessionary times, suggesting that the primary employment effect in food service manifested itself not in a relative employment decline but in fewer opportunities for entrants: jobs that typically went to entrants were filled by more experienced workers.

Extrapolating these regression results based on Pennsylvania data to the national experience of workforce entrants yielded mixed results. Substituting national data for food-service employment in this estimated equation resulted in predicted values for entrants nearly the size of the entire industry. Nevertheless, a number of important findings emerged from the estimation. Most notably, the estimation clearly showed that the ability of new entrants to secure entry level employment was markedly reduced by the increase in the minimum wage. While this estimation was not able to address the question of whether or not the overall employment effect was positive or negative, it shows that we must re-orient our focus in evaluating the minimum wage to include an awareness of who sits in those jobs. In addition, the Pennsylvania experience clearly addresses the effect of the unemployment rate on workforce entrants, as the national and state experience are quite similar.

Table 6

Regression Results

Independent Variable	Dependent Variable: Entrants into Food Service Coefficient	t-stat	Log Entrants into Food Service Coefficient	t-stat
Population	0.008	10.124	3.395	10.029
Food-Service Employment	7.2	7.162	1.746	6.212
Unemployment Rate	-12.374	-2.189	-0.036	-3.959
Minimum Wage	-125.49	-2.267	-0.228	-2.605
Spring/Summer Quarter	257.282	11.762	0.434	12.506
Constant	-3204.45	-6.687	-45.375	-8.655
Adjusted R^2		0.8606		0.8474

Concluding Remarks

The path to the economic mainstream begins in the food-service industry for about 22 percent of entrants into the Pennsylvania labor market. This represents an increase of 50 percent from 1975. The earnings of entrants into food service lag behind the earnings of entrants into other industries just as the earnings of experienced food-service workers fall short of the earnings of experienced workers in other sectors. Furthermore, workers who leave the industry earn more than those who stay in food service. The earnings differential comes from both lower wages and a shorter work week. To the extent that many people prefer less than full-time work, earnings differences are overstated, as the compensation on part-time jobs is less than on full-time ones. Workers with a strong preference for part-time work often accept lower wages as compensation for a more preferred work schedule.[11]

Changes in the labor market for inexperienced workers reduced their earnings as the proportion of relatively low-wage jobs increased. Job mobility, however, is an important feature of the U.S. labor market. Most new positions last a short while and earnings grow as workers move elsewhere. Furthermore, entrants into the trade sectors, including food service, develop communication skills that are widely used in other industries, which promotes a worker's ability to take advantage of opportunities in other industrial sectors. Increase in food-service employment, moreover, did not cause fewer manufacturing jobs, but rather served to absorb the labor market slack created by the demise of manufacturing in industrialized regions such as Pennsylvania.

The ability of workforce entrants to move beyond their very low initial wages, effectively closing the gap with workers who began on a supposedly faster career track, demonstrates that we need to do away with the many preconceptions we hold about entry level work. That work is indeed performed at a low wage, but the vast majority of these workers soon move on to more highly-paid employment.

The ability of workforce entrants to move beyond their very low initial wages, effectively closing the gap with workers who began on a supposedly faster career track, demonstrates that we need to do away with the many preconceptions we hold about entry level work. That work is indeed performed at a low wage, but the vast majority of these workers soon move on to more highly-paid employment.

The lesson for welfare reform and other government-sponsored training efforts is that the earnings and employment status of experienced workers has almost nothing to do with where these workers were first employed or how much they earned. Welfare reform should not be derailed by claims that there are no jobs immediately available which pay the equivalent of existing cash and in-kind benefits.

These results argue for a longer view beyond initial earnings. A reasonable goal would be to get people into jobs similar to those found by other inexperienced workers in the expectation that their earnings growth will be similar to that of workforce entrants in this data set.[12]

At the same time, policies which affect the cost of employment—such as higher minimum wages and payroll taxes—should be seriously re-evaluated. Higher costs for inexperienced workers lead to substitution of capital for low-wage labor, e.g., vending machines, as well as reducing output and and employment in the competitive retail trade sector which employs most entrants. Industries such as food-service

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11 In 1991 only 26.7 percent of people employed part-time did so for economic reasons such as inability to find full-time work. See Employment and Earnings, January 1992.

12 Admittedly, welfare beneficiaries have characteristics that differ from the population of workforce entrants as a whole. For example, they are typically single women with children and have reduced flexibility to engage in market work. This may also make it more likely that they periodically leave the labor force. They may also have less formal education than entrants in this data set. Their innate ability to work and advance, however, may be closer to that of inexperienced workers than to other workers in society.

are poorly positioned to pass along cost increases as price increases, since food-service competes with home production—meals at home.

Income support could be provided to low-wage workers in ways which would not reduce the number of available jobs. For example, wage subsidies could be instituted which provide additional earnings to workers for a transitional period after finding work, and the government could continue to provide health care to former welfare recipients. This mix of programs could help people get started on the road to economic self-sufficiency.

. . . it is clear that the ability of workforce entrants—by definition, the least skilled workers in the marketplace—to secure employment is adversely affected by changes in the minimum wage.

Finally, it is clear that the ability of workforce entrants—by definition, the least skilled workers in the marketplace—to secure employment is adversely affected by changes in the minimum wage. Understanding the effect of higher minimum wages can only partially be addressed by the employment issue. It is fundamentally more important to ask who gets—and doesn't get—those jobs.

APPENDIX

Figure A1

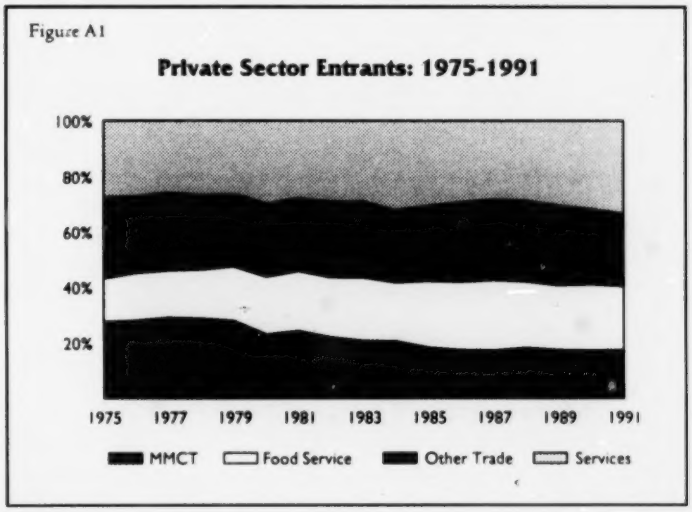


Figure A2

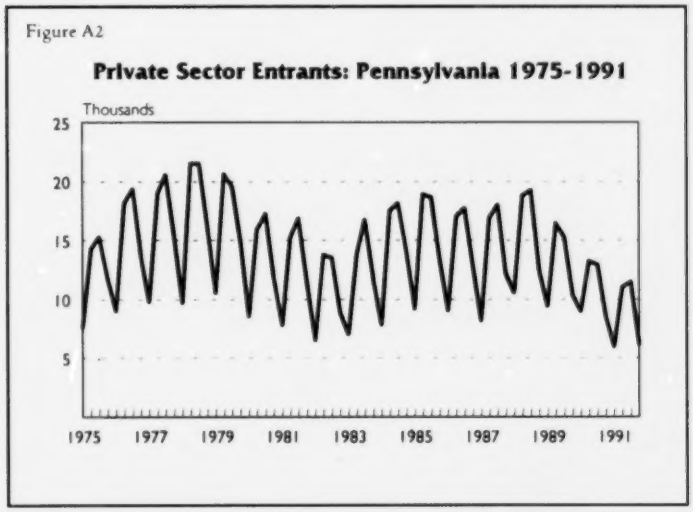
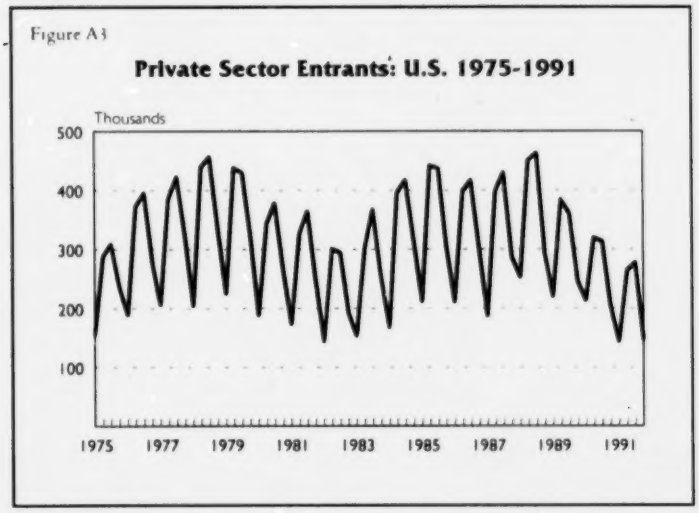


Figure A3



BIOGRAPHY

Dr. Frederick Tannery is an Associate Professor of Economics and Finance at Slippery Rock University and a Research Associate in Economics at the University of Pittsburgh. Dr. Tannery has used the data on which this study is based, along with Social Security earnings data, to examine the effect of structural changes on workers dislocated from the steel industry and compare the impact of structural change in urban and rural labor markets. He is currently using Social Security data to follow entrants into the Pennsylvania workforce and to document the earnings outcomes of recent college graduates. His other research efforts have examined the effect of unemployment insurance on job search and the duration of unemployment.

RECENT PUBLICATIONS

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